

IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF COLORADO

Civil Action No. 1:15-cv-00841

UNITED STATES OF AMERICA, and  
STATE OF COLORADO,

Plaintiffs,

v.

NOBLE ENERGY, INC.,

Defendant.

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**COMPLAINT**

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Plaintiffs, the United States of America, by authority of the Attorney General of the United States and acting at the request of the Administrator of the United States Environmental Protection Agency (“EPA”), and the State of Colorado, on behalf of the Colorado Department of Public Health and Environment (“CDPHE”), file this Complaint and allege as follows:

**I. STATEMENT OF THE CASE**

1. This is a civil action against Noble Energy, Inc. (“Noble” or “Defendant”) pursuant to Section 113(b) of the Clean Air Act (the “Act”), 42 U.S.C. § 7413(b), and Sections 121 and 122 of the Colorado Air Pollution Prevention and Control Act (the “Colorado Act”), C.R.S. §§ 25-7-121 and 122.

2. Plaintiffs seek injunctive relief and civil penalties for violations of the Act, the Colorado Act, and Colorado’s federally-approved State Implementation Plan (“SIP”) relating to

emissions of volatile organic compounds (“VOC”) from condensate storage tanks that are, or were until recently, part of Noble’s oil and natural gas production operations in the Denver-Julesburg (“D-J”) Basin in Boulder, Broomfield, and Weld counties, Colorado.

3. The tanks store hydrocarbon liquids known as “condensate” prior to transport and sale. Condensate is separated from natural gas near the well-head in a device known as a “separator.” After reaching pre-set levels in the separator, the condensate, also known as “pressurized liquids,” is emptied in batches into storage tanks kept at or near atmospheric pressure. As condensate is “dumped” into these tanks, the pressure drops and vapors, which include VOC and other air pollutants, are released or “flashed” into a gaseous state. Additional vapors are released from the condensate due to liquid level changes and temperature fluctuations. These are known as “working” and “breathing” losses.

4. The condensate tanks that are the subject of this Complaint are required to be equipped with air pollution control systems to route vapors from the tanks by vent lines to emissions control devices known as “combustors.”

5. In 2012, EPA and CDPHE inspected 99 of Noble’s surface locations that have one or more condensate storage tanks (“tank batteries”). Using optical gas-imaging infra-red cameras, EPA and CDPHE observed that many of the tank batteries were emitting VOC to the atmosphere from pressure relief valves (“PRVs”) and thief hatches on the tanks. At many of the tank batteries, EPA and CDPHE also observed other signs of active emissions, such as hearing hissing sounds, smelling hydrocarbons, and seeing visible wave refractions. The inspectors also observed hydrocarbon stains, an indication that vapors had been emitted from the tanks.

6. Further investigation indicated that Noble failed to conduct a formal engineering

design analysis to ensure that vent lines from the tanks were adequately sized to route all condensate vapors to emissions control devices. In many cases, the condensate tanks were connected to vent lines that even under optimal conditions (*e.g.* when piping is unobstructed by liquids build-up) did not have sufficient capacity to route all the vapors from the condensate tanks to emissions control devices, forcing vapors to be emitted to the atmosphere from PRVs and thief hatches on the tanks.

7. Noble owns or operates more than three thousand tank batteries in the D-J Basin that it has designated as being controlled to comply with the federally-enforceable provisions of the Colorado SIP relating to system-wide VOC emissions reduction requirements. At one or more of these tank batteries, Noble has violated, and is violating, the requirements in the Colorado SIP that:

- a. “[a]ll air pollution control equipment . . . shall be operated and maintained consistent with manufacturer specifications and good engineering and maintenance practices. . . . In addition, all such air pollution control equipment shall be adequately designed and sized to achieve the control efficiency rates required by this Section XII and to handle reasonably foreseeable fluctuations in emissions of volatile organic compounds. Fluctuations in emission that occur when the separator dumps into the tank are reasonably foreseeable;” and
- b. “[a]ll condensate collection, storage, processing and handling operations, regardless of size, shall be designed, operated and maintained so as to minimize leakage of volatile organic compounds to the atmosphere to the maximum extent practicable.”

8. VOC are a precursor to ground level ozone. Noble operates in an area where the air quality does not meet the National Ambient Air Quality Standard (“NAAQS”) for ground level ozone.

## **II. JURISDICTION AND VENUE**

9. This Court has jurisdiction over the subject matter of this action pursuant to section 113(b) of the Act, 42 U.S.C. § 7413(b), and pursuant to 28 U.S.C. §§ 1331, 1345 and 1355.

10. Venue is proper in this District under Section 113(b) of the Act, 42 U.S.C. § 7413(b), and 28 U.S.C. §§ 1391(b) and 1395(a) because the violations which are the basis of this Complaint occurred in this District, and the tank batteries at issue are operated by Noble in this District.

## **III. NOTICES**

11. Notice has been given to Noble and the appropriate air pollution control agency in the State of Colorado as required by Section 113 of the Act, 42 U.S.C. § 7413.

## **IV. DEFENDANT**

12. Noble is a Delaware corporation engaged in oil and gas production and exploration worldwide, and maintains its principal executive offices in Houston, Texas.

13. Noble has oil and natural gas production operations in the D-J Basin in Boulder, Broomfield, and Weld counties, Colorado. As of December 31, 2014, Noble’s operations in the D-J Basin included more than 8,500 natural gas production wells, which produced approximately 75 billion cubic feet of gas and more than 18 million barrels of oil/condensate.

14. Noble is a “person” as defined in Section 302(e) of the Act, 42 U.S.C. § 7602(e).

## **V. FACILITIES**

15. Noble owns and operates certain oil and natural gas production facilities in the D-J Basin that remove natural gas and liquids from subsurface rock formations, separate the natural gas from the liquids, and then store the separated liquids in tanks until being picked up by truck and transported either for sale (hydrocarbon liquids/condensate) or disposal (produced water).

16. Typically, field gas and liquids from Noble's natural gas production wells flow under pressure from the well-head to a "separator." The purpose of a separator is to separate gas from hydrocarbon liquids (known as "pressurized liquids" or "condensate") and, if present, water (also known as "produced water").

17. Hydrocarbon liquids and water separated from field gas are temporarily held under pressure in the separator until the liquids reach set levels when valves open and the liquids flow into storage tanks kept at or near atmospheric pressure. The pressurized liquids flow from the separator into a storage tank in what is commonly referred to in the industry as a condensate "dump." The frequency of condensate dumps is a function of the amount of pressurized liquids produced at the well(s) connected to the separator, the capacity of the separator, and the set point at which valves open and the pressurized liquids are released from the separator.

18. The combined gas and liquid stream flows from the well-head to the separator under field pressure. The separator has a pressure setting to optimize production and move the gas and liquids downstream in Noble's system, which may be operating at several hundred pounds per square inch ("psi"). The condensate storage tanks are kept near atmospheric pressure, at a positive pressure of not more than 1 psi (16 oz/in<sup>2</sup>).

19. When pressurized liquids are "dumped" into condensate storage tanks, the

pressure of the condensate quickly drops and hydrocarbon gases entrained in the pressurized liquids, including VOC, are rapidly emitted in a phenomenon known as “flashing.” After flashing occurs, the condensate continues to emit vapors as the liquids reach a steady state in what are known as “working” and “breathing” losses.

20. The condensate storage tanks are enclosed but have openings that are designed to vent to the atmosphere under certain circumstances, and are thus referred to as “atmospheric” storage tanks. The tanks are equipped with PRVs, which vent to the atmosphere to prevent the tanks from becoming over-pressurized and rupturing. The PRVs are normally set at 0.75 psi (12 oz/in<sup>2</sup>) to 0.875 psi (14 oz/in<sup>2</sup>), and emit vapors when the tank pressure exceeds this setting or when not properly maintained. The tops of the tanks also have openings known as “thief hatches.” The thief hatches are equipped with gaskets to seal tight when closed and latched. The thief hatches are normally set to withstand a tank pressure of between .875 psi (14 oz/in<sup>2</sup>) and 1 psi (16 oz/in<sup>2</sup>). Thief hatches will emit condensate vapors to the atmosphere when not closed and latched, when not properly maintained, or when the pressure of the tank exceeds the pressure setting.

21. Emissions from condensate storage tanks are controlled by routing condensate vapors to devices known as combustors. The combustors burn condensate vapors, including VOC, which result from flashing, working, and breathing losses. The vent lines from the condensate storage tanks to the combustors, and all connections, fittings, relief valves (including PRVs on the tanks), thief hatches (on the tanks), and any other appurtenance used to contain and collect condensate storage tank vapors, and to transport or convey the vapors to the combustor, are referred to herein as a “Vapor Control System.” Noble may use a single Vapor Control

System to transport vapors from more than one tank battery to more than one combustor.

22. The specific condensate storage tanks/tank batteries that are the subject of the violations alleged in this Complaint are listed on Appendix A, incorporated herein by reference. Column 2 lists the name of the tank battery where the one or more condensate storage tanks are located. Column 3 lists identification numbers, known as AIRS identification numbers, which CDPHE assigned to each condensate storage tank or group of storage tanks at a tank battery.

## **VI. STATUTORY AND REGULATORY BACKGROUND**

23. As set forth in Section 101(b)(1) of the Act, 42 U.S.C. § 7401(b)(1), the purpose of the Clean Air Act is to protect and enhance the quality of the nation's air, so as to promote the public health and welfare and the productive capacity of its population.

### **A. National Ambient Air Quality Standards**

24. Section 108 of the Act, 42 U.S.C. § 7408, directs EPA to identify those air pollutants which “may reasonably be anticipated to endanger public health or welfare” and to issue air quality criteria for them based on “the latest scientific knowledge” about the effects of the pollutants on public health and the environment. These pollutants are known as “criteria pollutants.”

25. Section 109 of the Act, 42 U.S.C. § 7409, requires EPA to promulgate regulations establishing national ambient air quality standards (“national standards” or “NAAQS”) for criteria pollutants. The primary standard must be set at the level “requisite to protect the public health” with an adequate margin of safety, and the secondary standard is intended to protect “the public welfare.” According to Section 302(h) of the Act, 42 U.S.C. § 7602(h), public welfare effects are “effects on soils, water, crops, vegetation” and other environmental impacts including,

but not limited to, effects on animals, wildlife, property, and “effects on economic values.”

26. Pursuant to Section 107(a) of the Act, 42 U.S.C. § 7407(a), the states are primarily responsible for ensuring attainment and maintenance of the NAAQS. States implement the NAAQS on a region-by-region basis, within air quality control regions (or “areas”) throughout the state. Once EPA has promulgated a new or revised NAAQS pursuant to Section 107(d) of the Act, 42 U.S.C. § 7407(d), each state is required to submit to EPA a list of those areas within its boundaries where the air quality is better or worse than the NAAQS or where the air quality cannot be classified due to insufficient data. An area with an ambient air concentration that meets the NAAQS for a particular pollutant is an “attainment” area. An area with ambient air concentrations that exceed the NAAQS is a “nonattainment” area. An area that cannot be classified due to insufficient data is “unclassifiable.”

27. Section 107(d) of the Act, 42 U.S.C. § 7407(d), establishes deadlines for EPA to declare by rule a “designation” for each area in the country as being in attainment, nonattainment, or unclassifiable for every new or revised NAAQS, based upon each state’s submitted list.

28. Pursuant to Section 110(a) of the Act, 42 U.S.C. § 7410(a), each state must adopt and submit to EPA for approval a plan that provides for the attainment, maintenance and enforcement of the NAAQS for each criteria pollutant in each air quality control region within the state. This plan is known as a state implementation plan or “SIP.” Section 110(a)(2)(A) of the Act, 42 U.S.C. § 7410(a)(2)(A), requires that each SIP include enforceable emissions limitations to assure attainment of the NAAQS.

29. Tropospheric ozone, or “smog,” forms at ground level, unlike the stratospheric



ozone which is produced miles above the earth's surface and forms a shield from ultraviolet radiation. Due to the adverse effects of ground-level ozone on human health and the environment, ground-level ozone is one of six criteria pollutants for which EPA has promulgated national ambient air quality standards. *See* 73 Fed. Reg. 16,436 (Mar. 27, 2008).

30. At all times relevant to this action, most of Noble's natural gas production system in the D-J Basin, including the tank batteries that are specifically at issue in this action, has been located within an area in Colorado designated by EPA as "nonattainment" for the national standard for ozone. *See* 72 Fed. Reg. 53,952 (Sept. 21, 2007) and 77 Fed. Reg. 28,424 (May 14, 2012).

B. The Ozone NAAQS

31. Under Section 109(d)(1) of the Act, 42 U.S.C. § 7409(d)(1), the NAAQS for each criteria pollutant must be periodically reviewed and, if appropriate, revised.

32. In 1997, EPA revised the national standard for ground-level ozone by lowering it from 0.12 parts per million ("ppm") to 0.08 ppm. *See* 62 Fed. Reg. 38,856 (July 18, 1997).

33. Under the 1997 NAAQS for ozone, an area meets the standard if it does not exceed the 0.08 ppm concentration level in the ambient air, based on an average of the 3-year average of the annual fourth-highest daily maximum measured at each air monitor within the area. Each "daily maximum" is measured as an 8-hour average. *See* 62 Fed. Reg. 38,856 (July 18, 1997).

34. In 2004, pursuant to Section 107(d)(1) of the Act, 42 U.S.C. § 7407(d)(1), EPA promulgated its "designations rule" for the 1997 ozone NAAQS, in which EPA declared formal designations for each area in the country as being in attainment, nonattainment, or unclassifiable

for the 1997 ozone standard. *See* 69 Fed. Reg. 23,858 (April 30, 2004).

35. In its 2004 designations rule, EPA designated the “Denver-Boulder-Greeley-Ft. Collins-Loveland Area” (the “Denver EAC Area”) as being nonattainment for the 1997 ozone NAAQS. EPA deferred the effective date for the Denver EAC Area and other areas that chose to participate in EPA’s new Early Action Compact (“EAC”) program, which provided incentives for early planning, implementation, and attainment of the NAAQS. *See* 69 Fed. Reg. 23,858 (Apr. 30, 2004) and 40 C.F.R. § 81.306.

36. Each state signatory to the Early Action Compact (“the Compact”) agreed to attain the ozone NAAQS earlier than the Act mandated, in exchange for a deferred effective date of its nonattainment designation. Under the terms of the Compact and EPA regulations, all EAC areas were required to attain the 1997 ozone NAAQS by December 31, 2007. 40 C.F.R. § 81.300(e).

37. Under the Compact and federal regulations, the 1997 ozone NAAQS was to be implemented by successfully meeting a series of milestones. Failure to meet a required milestone caused the nonattainment date designation to become effective for an EAC area, triggering statutory requirements for nonattainment areas under the Act. *See* 69 Fed. Reg. 23,858 (Apr. 30, 2004).

38. As a required milestone, by March 31, 2004, the Denver EAC Area was required to submit to EPA an Ozone Action Plan with “specific, quantified, and permanent” local control measures designed to reduce ozone in the ambient air. The local control measures were to be adopted by the state and submitted to EPA for approval. Upon EPA approval, the local control measures were to become incorporated into Colorado’s SIP. 40 C.F.R. § 81.300(e).

39. After enforceable state emission limitations are approved by EPA for incorporation into the SIP, these SIP provisions (or “SIP rules”) are federally enforceable under Sections 113(a) and (b) of the Act, 42 U.S.C. § 7413(a) and (b).

C. Colorado’s EAC SIP and Overview of Regulation 7

40. Ozone is not emitted directly from sources of air pollution. Ozone is a photochemical oxidant, formed when certain chemicals in the ambient air react with oxygen in the presence of sunlight. These chemicals – VOC and nitrogen oxides (NO<sub>x</sub>) – are called “ozone precursors.” Sources that emit ozone precursors are regulated to reduce ground-level ozone in the ambient air. *See* 62 Fed. Reg. 38,856 (July 18, 1997).

41. Initially adopted by Colorado’s Air Quality Control Commission (“AQCC”) in the 1970s, Regulation 7 was repealed and re-promulgated in 1980 as “A Regulation to Control Volatile Organic Compounds.” Codified at 5 CCR 1001-9. The State of Colorado relies in part on Regulation 7 to attain the NAAQS for ozone.<sup>1</sup> *See* 40 C.F.R. § 52.320.

42. Colorado’s Ozone Action Plan, a required EAC milestone, amended Regulation 7 to add four new local control measures to reduce VOC emissions. One of these measures, “Condensate Emissions Controls,” added Section XII to Regulation 7 (hereinafter “Reg. 7, Sec. XII”) to require the reduction of VOC emissions from oil and gas operations that collect, store, or handle condensate in the 8-hour Ozone Control Area. These control measures were the

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<sup>1</sup> Colorado Regulation 7 has been periodically revised. The latest version approved by EPA was approved on February 13, 2008, with an effective date of April 14, 2008. *See* 73 Fed. Reg. 8,194 (Feb. 13, 2008). Since then, Colorado has revised Regulation 7 several times. For clarity and completeness, where appropriate, the Complaint cites both versions, designated as “SIP-Approved Reg. 7” and “State-Approved Reg. 7”).

selected strategies to be implemented to attain the ozone NAAQS. *See* EAC Ozone Action Plan (approved by the AQCC on Mar. 12, 2004).<sup>2</sup>

43. Among other things, Reg. 7, Sec. XII mandates an overall (or “system-wide”) percentage reduction of condensate tank VOC emissions that must be achieved by oil and gas operations in the Denver EAC Area. Instead of requiring emissions controls on every unit, Reg. 7, Sec. XII requires each owner or operator to select which of its condensate tanks to control (“controlled”) in order to achieve the required system-wide percentage reduction in VOC emissions.

44. Following revisions to Reg. 7, Sec. XII by the AQCC in response to EPA concerns about enforceability, EPA approved Colorado’s EAC Ozone Action Plan and associated local control measures – including the amendments to Regulation 7 – in 2005. *See* 70 Fed. Reg. 48,652 (Aug. 19, 2005). The revisions included requiring sources to maintain up-to-date spreadsheets to track emissions reductions and specify which tank battery locations are being controlled, “so inspectors can check for compliance at any time.” *See* AQCC’s Rulemaking Package for Revisions to Regulation 7 (Sep. 10, 2004).<sup>3</sup> These federally-approved control measures were added to the provisions of Regulation 7 that were already part of Colorado’s federally-approved SIP. *See* Colorado’s SIP rules codified at 40 C.F.R. § 52.350

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<sup>2</sup> This document is in the docket for the Notice of Proposed Rule (NPR) approving Reg. 7: Docket No. R08-OAR-2005-CO-0001, for the NPR at 70 Fed. Reg. 28,239 (May 15, 2005), *available online at* Regulations.gov.

<sup>3</sup> This document is in the docket for the Notice of Proposed Rule (NPR) approving Reg. 7: Docket No. R08-OAR-2005-CO-0001, for the NPR at 70 Fed. Reg. 28,239 (May 15, 2005), *available online at* Regulations.gov.

(2014).

45. In its 2006 EAC Progress Report, Colorado reported that it had fallen short of achieving the planned VOC emissions reductions from oil and natural gas production operations in the Denver EAC Area due to an increase in condensate tank flash emissions that significantly exceeded projections in the SIP, and that a more stringent regulatory scheme was needed to attain the NAAQS for ozone. *See* 72 Fed. Reg. 35,356 (June 28, 2007).

46. Colorado subsequently adopted further revisions to Regulation 7, including requirements for greater system-wide reductions of emissions of VOC, additional monitoring, reporting, and recordkeeping requirements to improve compliance, and general requirements for air pollution control equipment, prevention of leakage, and flares and combustion devices. EPA approved these revisions on February 13, 2008, which rule became effective on April 14, 2008. *See* 73 Fed. Reg. 8,194 (Feb. 13, 2008).<sup>4</sup>

47. On November 20, 2007, Denver EAC Area's nonattainment designation automatically became effective following a violation of the ozone NAAQS recorded by air quality monitors in the 8-hour Ozone Control Area during the previous summer ("Ozone Season

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<sup>4</sup> The state-adopted version of Section XII, submitted to EPA as part of a SIP revision in 2009, was disapproved by EPA. *See* 76 Fed. Reg. 47,443 (Aug. 5, 2011). The State of Colorado has revised Regulation 7, most recently on March 25, 2014, including "state-only" enforceable provisions. *See* State: CO Action: Final Regulations Department: Department of Public Health and Environment, 2014 CO REG TEXT 345713 (NS), 2014 WLNR 8664566. The numeration system of Regulation 7 has also changed from the 2008 version EPA approved. All citations in Parts D and E below are to the 2008 EPA-approved SIP language, which remains substantially unaltered by subsequent state revisions.

2007”). *See* 72 Fed. Reg. 53,952 (Sep. 21, 2007).

48. Pursuant to Section 109(d)(1) of the Act, 42 U.S.C. § 7409(d)(1), EPA again revised the national standard for ozone in 2008. To protect public health, the NAAQS was revised to a more stringent level of 0.075 ppm (measured as an 8-hour average). *See* 73 Fed. Reg. 16,436 (Mar. 27, 2008).

49. In May 2012, EPA promulgated its designations rule for the 2008 ozone NAAQS and formally designated the Denver EAC Area as nonattainment for the 2008 ozone NAAQS, with an effective date of July 20, 2012. *See* 77 Fed. Reg. 30,088 (May 21, 2012).

D. Regulation 7: Applicable Provisions

50. Reg. 7, Sec. XII applies to oil and gas operations “in the 8-hour Ozone Control Area.” *See* Reg. 7, Sec. I.A.1.d.

51. Pursuant to the definition set forth in Reg. 7, Sec. II.A.1, the term “8-hour Ozone Control Area” refers to an area with boundaries that are identical to the boundaries of the Denver EAC Area that EPA had designated as nonattainment for the 1997 ozone NAAQS, with a deferred effective date. *See* 69 Fed. Reg. 23,858 (Apr. 30, 2004); 40 C.F.R. § 81.306.

52. Reg. 7, Sec. XII.A sets forth VOC emissions reduction requirements for oil and gas operations. Pursuant to Reg. 7, Sec. XII.A.1, all oil and gas exploration and production operations “that collect, store, or handle condensate in the 8-hour Ozone Control Area,” located upstream of a natural gas plant, and for which “the owner or operator filed, or was required to file, an APEN [Air Pollution Emission Notice] pursuant to Regulation No. 3” are “affected operations” that must comply with the system-wide VOC emission reduction requirements set

forth in Reg. 7, Sec. XII.A.<sup>5</sup>

53. As set forth in SIP-Approved Reg. 7, Sec. XII.A.2 (State-Approved Reg. 7, Sec. XII.D), these emission reductions “shall not be required for each and every unit, but instead shall be based on overall reductions in uncontrolled actual emissions from all the atmospheric storage tanks associated with affected operations for which the owner or operator filed, or was required to file, an APEN pursuant to Regulation No. 3.”

54. As set forth in SIP-Approved Reg. 7, Sec. XII.D.6 (State-Approved Reg. 7, Sec. XII.B.3), an atmospheric condensate storage tank is “a type of condensate storage tank that vents, or is designed to vent, to the atmosphere.”

55. As set forth in SIP-Approved Reg. 7, Sec. XII.A.2 (State-Approved Reg. 7, Sec. XII.D), “[t]he owners and operators of affected operations shall employ air pollution control equipment to reduce emissions of volatile organic compounds from atmospheric storage tanks associated with affected operations by the dates and amounts listed” in SIP-Approved Reg. 7, Sec. XII.A (State-Approved Reg. 7, Sec. XII.D).

56. As set forth in SIP-Approved Reg. 7, Sec. XII.A.2.c (State-Approved Reg. 7, Sec. XII.D.2.a), for the ozone season (May 1 through September 30) of each year from 2007 through 2011, “such emissions shall be reduced by 75% from uncontrolled actual emissions on a weekly basis.” As set forth in SIP-Approved Reg. 7, Sec. XII.A.2.d (State-Approved Reg. 7, Sec. XII.D.2.a), for the ozone season of each year beginning with 2012, “such emissions shall be

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<sup>5</sup> Operations having less than 30 tons-per-year of actual uncontrolled VOC emissions from all condensate storage tanks in the 8-hour Ozone Control Area are exempt. *See* SIP-Approved Reg. 7, Sec. XII.A.1, XII.A.8 (State-Approved Reg. 7, Sec. XII.A.5). This exemption does not apply to Noble’s operations.

reduced by 78% from uncontrolled actual emissions on a weekly basis.” As set forth in SIP-Approved Reg. 7, Sec. XII.A.2.h (State-Approved Reg. 7, Sec. XII.D.2.a(vii)), beginning with the year 2008, and for each year thereafter, emissions during the non-ozone season (January 1 through April 30 and October 1 through December 31) “shall be reduced by 70% from uncontrolled actual emissions, calculated as an average of the emission reduction achieved during the seven months covered by the two periods.”<sup>6</sup>

57. Operators of affected operations are required to designate which atmospheric condensate storage tanks the operator has chosen to control in order to meet the system-wide emission reductions, and among other things report VOC emission reductions. *See* SIP-Approved Reg. 7, Sec. XII.A.4. & XII.A.5 (State-Approved Reg. 7, Sec. XII.D).

58. Those condensate storage tanks that an operator designates as being controlled are subject to certain general requirements applicable to the air pollution control equipment. *See* SIP-Approved Reg. 7, Sec. XII.D.2 (State-Approved Reg. 7, Sec. XII.C.1). These requirements include:

- a. “All air pollution control equipment required by this Section XII shall be operated and maintained consistent with manufacturer specifications and good engineering and maintenance practices. The owner or operator shall keep manufacturer

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<sup>6</sup> The State of Colorado has amended these provisions requiring greater percentages of emission reductions that have not yet been submitted to or approved by EPA so as to become part of the Colorado SIP and federally enforceable. A current version of the State approved Regulation 7, codified at 5 C.C.R. 1001-9, is available at the following web address: [www.colorado.gov/cs/Satellite/CDPHE-Main/CBON1251601911433](http://www.colorado.gov/cs/Satellite/CDPHE-Main/CBON1251601911433). For the summer ozone season, from May 1 through September 30, on a system-wide basis VOC emissions must now be reduced by 90%.



specifications on file.” SIP-Approved Reg. 7, Sec. XII.D.2.a (State-Approved Reg. 7, Sec. XII.C.1.a).

- b. “[A]ll such air pollution control equipment shall be adequately designed and sized to achieve the control efficiency rates required by this Section XII and to handle reasonably foreseeable fluctuations in emissions of volatile organic compounds. Fluctuations in emissions that occur when the separator dumps into the tank are reasonably foreseeable.” *Id.*
- c. “All condensate collection, storage, processing and handling operations, regardless of size, shall be designed, operated, and maintained so as to minimize leakage of volatile organic compounds to the atmosphere to the maximum extent practicable.” SIP-Approved Reg. 7, Sec. XII.D.2.b (State-Approved Reg. 7, Sec. XII.C.1.b).

These provisions became federally enforceable on April 14, 2008, the date EPA’s rule approving these provision as part of the Colorado SIP became effective. *See* 73 Fed. Reg. 8,194 (Feb. 13, 2008).

#### E. Regulation 3: Applicable Provisions

59. Certain provisions of AQCC Regulation Number 3 contain general permitting and reporting requirements for stationary sources. The provisions of Regulation 3 have been part of Colorado’s SIP since the 1980s. *See* 40 C.F.R. § 52.320.

60. Regulation 3, Part A, Section II.A (“Reg. 3, Part A, Sec. II.A”) sets forth the criteria concerning who must file an APEN. Reg. 3, Part A, Sec. II.A states, in pertinent part, that unless specifically exempted under Reg. 3, Part A, Sec. II.D, “no person shall allow

emission of air pollutants from . . . any facility, process or activity which constitutes a stationary source, except residential structures, from which air pollutants are, or are to be, emitted unless and until an Air Pollutant Emission Notice . . . has been filed with the Division with respect to such emission.”

## **VII. FACTUAL BACKGROUND**

61. At all times relevant to the Complaint, Noble conducted oil and natural gas production operations in the 8-hour Ozone Control Area, located upstream of a natural gas plant, for which Noble was required to file, and did file, APENs pursuant to Regulation No. 3. As such, Noble had “affected operations” within the meaning of SIP-Approved Reg. 7, Sec. XII.D.5 (State-Approved Reg. 7, Sec. XII.B.1), and is subject to the requirements as set forth in Reg. 7, Sec. XII.

62. Noble filed APENs with CDPHE for each of the tank batteries identified on Appendix A.

63. At all times material to the Complaint, in accordance with SIP-Approved Reg. 7, Sec. XII.A.4 (State-Approved Reg. 7, Sec. XII.D), Noble designated that VOC emissions from each of the tank batteries identified on Appendix A were being controlled as part of Noble’s D-J Basin system-wide control strategy to achieve the emission reductions required by SIP-Approved Reg. 7, Sec. XII.A.2 (State-Approved Reg. 7, Sec. XII.D.2).

64. All of the tank batteries identified on Appendix A are subject to the general requirements of Regulation 7 set forth at SIP-Approved Reg. 7, Sec. XII.D.2a. & b (State-Approved Reg. 7, Sec. XII.C.1.a and b).

**FIRST CLAIM FOR RELIEF**

(Violation of SIP-Approved Reg. 7, Sec. XII.D.2.a./State-Approved Reg. 7, Sec. XII.C.1)

65. Paragraphs 1 through 64 are re-alleged and incorporated herein by reference.

66. Noble failed to do a formal engineering design analysis to determine if the Vapor Control Systems at one or more of the tank batteries identified on Appendix A had the capacity to route all condensate tank emissions, from the peak flow of flashing, working, and breathing losses, to an emissions control device. Noble also failed to determine whether, when, or how often the Vapor Control Systems at one or more of the tank batteries identified on Appendix A might become obstructed by liquids build-up, or the impact of natural gas being carried through from the separator to liquids lines, condensate storage tanks, and Vapor Control Systems.

67. The Vapor Control Systems used by Noble to route vapors from one or more of the tank batteries identified on Appendix A to combustors to control VOC emissions do not have sufficient carrying capacity to convey all of the condensate tank vapors to combustors under optimum conditions, when the vent lines are unobstructed and not over-pressurized by natural gas being carried through to condensate storage tanks and associated Vapor Control Systems.

68. The capacity of the Vapor Control Systems at one or more of the tank batteries identified on Appendix A can be reduced by: (a) liquids condensing and accumulating in vent lines as vapors cool; and (b) natural gas being carried through from the separator to liquids lines, condensate storage tanks, and Vapor Control Systems.

69. When the capacity of a Vapor Control System is exceeded, condensate vapors and VOC are emitted to the atmosphere through PRVs and thief hatches.

70. At one or more of the tank batteries identified on Appendix A, Noble has violated, and is violating, the requirements of SIP-Approved Reg. 7, Sec. XII.D.2.a (State-Approved Reg.

7, Sec. XII.C.1.a) that “[a]ll air pollution control equipment . . . shall be operated and maintained consistent with manufacturer specifications and good engineering and maintenance practices . . . . In addition, all such air pollution control equipment shall be adequately designed and sized to achieve the control efficiency rates required by this Section XII and to handle reasonably foreseeable fluctuations in emissions of volatile organic compounds. Fluctuations in emission that occur when the separator dumps into the tank are reasonably foreseeable.”

71. Pursuant to Section 113(b) of the Act, 42 U.S.C. § 7413(b), and Sections 121 and 122 of the Colorado Act, C.R.S. §§ 25-7-121 and 122, Noble is liable for injunctive relief and civil penalties of up to \$37,500 per day for each violation. *See* 78 Fed. Reg. 66,643 (Nov. 6, 2013).

### **SECOND CLAIM FOR RELIEF**

(Violation of SIP-Approved Reg. 7, Sec. XII.D.2.b/State-Approved Reg. 7, Sec. XII.C.1.b)

72. Paragraphs 1 through 71 are re-alleged and incorporated herein by reference.

73. At one or more of the tank batteries identified on Appendix A, Noble has violated, and is violating, the requirements of SIP-Approved Reg. 7, Sec. XII.D.2.b (State-Approved Reg. 7, Sec. XII.C.1.b) that “[a]ll condensate collection, storage, processing and handling operations, regardless of size, shall be designed, operated and maintained so as to minimize leakage of volatile organic compounds to the atmosphere to the maximum extent practicable.”

74. Pursuant to Section 113(b) of the Act, 42 U.S.C. § 7413(b), and Sections 121 and 122 of the Colorado Act, C.R.S. §§ 25-7-121 and 122, Noble is liable for injunctive relief and civil penalties of up to \$37,500 per day for each violation. *See* 78 Fed. Reg. 66,643 (Nov. 6, 2013).

WHEREFORE, based on the allegations contained in paragraphs 1 through 74 above,

Plaintiffs request that this Court:

- A. Permanently enjoin Defendant from further violating the Act, the Colorado Act, the Colorado SIP, and the regulations implementing the Act, the Colorado Act, and the Colorado SIP including applicable provisions of Colorado Regulation 7;
- B. Order Defendant to take appropriate actions to remedy, mitigate, and offset the harm to public health and the environment caused by the violations of the Act, the Colorado Act, the Colorado SIP, and the regulations implementing the Act, the Colorado Act, and the Colorado SIP including applicable provisions of Colorado Regulation 7;
- C. Assess a civil penalty against Defendant for each violation of the applicable provisions of the Act, the Colorado Act, the Colorado SIP, and the regulations implementing the Act, the Colorado Act, and the Colorado SIP, of up to \$37,500 per day for each violation;
- D. Award Plaintiffs their costs of this action; and
- E. Grant such other and further relief as the Court deems just and proper.

Respectfully submitted,

FOR THE UNITED STATES OF AMERICA

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